HYBRID MICROTURBINE FOR GENERATION ELECTRICITY

ABSTRACT OF THE DISCLOSURE

A hybrid microturbine to produce electrical output power within a engine housing, having a combustor, and a two spool multi stage compressor wherein the 1st spool has a compressor rotor and a turbine rotor as a turbocharger and the 2nd rotor spool has an alternator rotor integrated with a compressor rotor and turbine rotor. The two individual compressor rotors have rotating blades attached and located in compressor housings with fluid communication. The alternator rotor as part of the 2nd spool has permanent magnets integrated and positioned in close proximity and co-axial to the electrical stator module having an iron laminated structure with electrical wires. Relative rotational motion between the stator and alternator rotor cause electricity to be generated.